

### 3.7 CULTURAL RESOURCES

This section discusses cultural resources within the cultural study area (see Figure 1-2). Cultural resources consist of sites, buildings, structures, objects, and districts or other places of human activity that are considered significant to a community, culture, or ethnic group. These resources may be historic or prehistoric in age, or a combination of both. The cultural study area refers to the entire boundary of San Elijo Lagoon. The proposed project area of potential effects (APE) is the extent of physical disturbance for the undertaking as shown in Figure 3.7-1. The APE does not include areas that would be temporarily flooded.

This EIR/EIS meets the requirements of both CEQA and NEPA. NEPA is being used to meet the requirements of Section 106 of the National Historic Preservation Act (NHPA). Under the NHPA, historic properties are any prehistoric or historic district, site, building, structure, or object included in, or eligible for, the National Register of Historic Places (NRHP) (36 CFR 800.16). Evaluation criteria for the NRHP are provided in 36 CFR Section 60.4 as detailed below in Section 3.7.2. Section 106 of the NHPA provides a consultation process for assessing effects of federal undertakings to historic properties. Section 106 requires federal agencies to consider the effects of their undertaking on historic properties. Furthermore, it requires an agency to afford the State Historic Preservation Officer (SHPO), any potentially affected Native American tribe(s), and the Advisory Council on Historic Preservation (ACHP) an opportunity to comment on any of the agency's undertakings that could affect historic properties. Federal undertakings include federal projects, permits, grants, and loans. The purpose of Section 106 is to avoid unnecessary impacts to historic properties from federal undertakings. The Section 106 review process is described in the ACHP regulations (36 CFR Part 800, as amended August 5, 2004) and Corps implementing regulations at 33 CFR Part 325, Appendix C.

To comply with Section 106 of the NHPA, the Corps will contact the Native American Heritage Commission (NAHC) as well as Native American contacts identified by the NAHC to inform them of the proposed project and request information regarding the nature of cultural and Native American resources within the proposed project area. Once tribal consultations have been initiated, the Corps would initiate Section 106 consultation with SHPO. A Corps permit authorization cannot be finalized until all components of the Section 106 process have been fulfilled. If a Memorandum of Agreement (MOA) or Programmatic Agreement (PA) is necessary to address adverse effects on historic properties, then the terms of the MOA or PA would be incorporated into the Corps' final permit decision.

Under CEQA, important significant resources are those that meet one or more of the evaluation criteria for the California Register of Historical Resources (CRHR). The CRHR criteria are modeled after the NRHP criteria. Sites that are eligible for the NRHP are automatically

considered eligible for the CRHR. CEQA also applies to archaeological resources that do not meet the criteria of a historical resource, but do meet the definition of a unique archaeological resource in PRC Section 21083.2, as follows:

An archaeological artifact, object, or site about which it can be clearly demonstrated that, without merely adding to the current body of knowledge, there is a high probability that it meets any of the following criteria:

- (1) Contains information needed to answer important scientific research questions and a demonstrable public interest in that information.
- (2) Has a special and particular quality such as being the oldest of its type or the best available example of its type.
- (3) Is directly associated with a scientifically recognized important prehistoric or historic event or person.

The assessment of the project's potential to have an adverse impact on cultural resources is based on the following technical resource study: "*Archaeological Survey in Support of the San Elijo Lagoon Restoration Project Environmental Impact Report/Environmental Impact Statement, San Diego County, California*" dated January 2014 and prepared by AECOM. The results of this analysis are presented below and the study is included as Appendix I to this EIR/EIS with confidential records and maps on file at the County DPR and deposited with the South Coastal Information Center (SCIC). This section summarizes the more detailed technical report prepared by AECOM in 2014 (Appendix I).

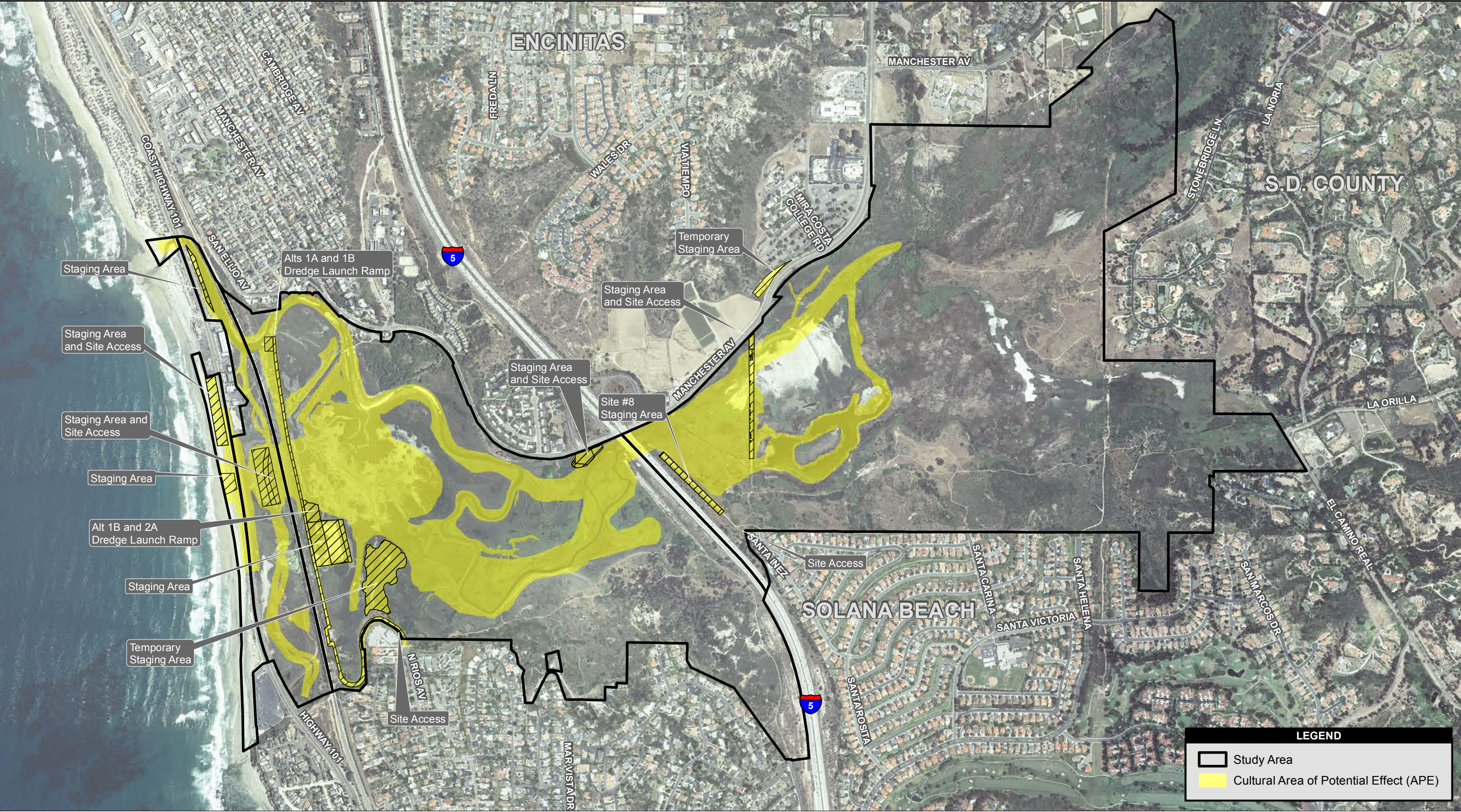
#### **3.7.1 AFFECTED ENVIRONMENT**

This section provides an overview of the current understanding of human occupation of the California coast and lagoons/estuaries like San Elijo from 8,000 to 9,000 years ago to the more recent history of the 20th century. The San Elijo lagoon area has been extensively studied and 30 previously recorded cultural resources are within 300 feet of the cultural study area. A pedestrian survey was performed in non-lagoonal sediment areas by AECOM cultural resources staff in November 2012 as part of this EIR/EIS. Areas where sites were previously recorded were also surveyed to determine the current nature and status of these resources.

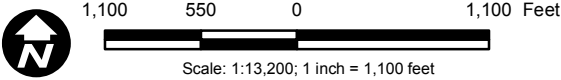
#### **Regional Prehistory and History**

By about 8,000 years ago, it appears that the rise in sea level began to slow, allowing the formation of productive bay, lagoon, and estuary habitats at many locations along the San Diego





Source: SANDAG 2012; DPR; City of Encinitas 2010; AECOM; MoffattNichol 2013



**Figure 3.7-1**  
**Cultural Area of Potential Effect (APE)**



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County coastline (Carbone 1991; Masters and Gallegos 1997), including at what is known today as San Elijo Lagoon (Byrd et al. 2004). These habitats seem to have supported a substantial coastal population during the early Archaic. At San Elijo Lagoon, data suggest that the lagoon was closed to tidal circulation between about 3,500 and 1,100 years ago and may have resulted in a population movement inland and southward in response to siltation and declining productivity of coastal lagoons in the northern portion of the county.

By the time the Spanish arrived in California, the project area was within the territory of a loosely integrated cultural group historically known as the Kumeyaay, or Northern Diegueño. Major ethnohistoric villages in the vicinity of the proposed project were *Kuiauma* near the mouth of San Elijo Lagoon and *Hapai* on the San Dieguito River, approximately 5 miles east of the lagoon (Krober 1925).

Europeans first entered the project region in 1769, when members of the Spanish Portola expedition crossed through the area (Brown 2001). For the next nearly 80 years, the area around San Elijo Lagoon remained largely undeveloped and was used mainly for grazing and agriculture. Major transportation routes developed along the coast in the early 20th century and included the Coast Route (later known as Coast Highway 101) and the Atchison, Topeka, and Santa Fe Railroad. During the 1920s, the communities of Solana Beach, Encinitas, and Rancho Santa Fe began to develop around the lagoon (Pryde 1992; Moyer 1969). To meet the need for improved transportation routes, I-5 was developed along coastal San Diego County.

### **Existing Cultural Records Search Results**

A records and literature search was conducted at the SCIC to provide information on previous cultural resources surveys and known previously recorded cultural resource sites within a 300-foot radius of the cultural study area. Also consulted were the 2012 RBSP EA/Final EIR (SANDAG 2011), addressing sites proposed as part of the materials disposal/reuse component, and a cultural resources management technical report for San Elijo Lagoon (Byrd et al. 2004). Although it did not provide information regarding cultural resources, a geotechnical sampling study (URS 2012) was consulted for depths of sediments in the lagoon. The 2012 RBSP provided information on the presence/absence of cultural resources at offshore placement sites and nearshore and onshore receiver sites for both programs. The study by Byrd and others documents the results of National Science Foundation (NSF)-funded archaeological and paleontological investigations on prehistoric hunter-gatherers at San Elijo Lagoon. The investigations included a paleoreconstruction based on a coring program and other environmental data, and archaeological excavations and artifact analyses of eight prehistoric shell middens or shell scatters in the lagoon. The focus of the coring program, conducted in the eastern and upper portions of the lagoon, was to provide data regarding paleoenvironments, also

revealed sediment deposits ranging from approximately 35 feet to 105 feet in depth in those areas. The research sources revealed that much of the cultural study area has undergone intensive pedestrian survey for cultural resources, resulting in the identification of 21 prehistoric archaeological sites, seven historic archaeological sites, two sites with both prehistoric and historic components, and four historic structures. No isolated artifacts were previously recorded within the cultural study area.

#### ***Archaeological Resources***

Previous investigations have recorded 30 archaeological sites within 300 feet of the cultural study area (Figure 1-2) (Table 3.7-1) and none within the materials disposal/placement study area. One additional site, CA-SDI-20,816, was identified during the intensive pedestrian surveys conducted within the cultural study area in support of this document (Wahoff and Cooley 2012). Ground visibility was generally moderate to high. Most of these archaeological resources have not been formally evaluated for eligibility and are therefore considered potentially eligible for the NRHP. Examination of the digital records search information provided by the SCIC and surveys conducted by AECOM archaeologists revealed that none of the previously identified cultural resources or newly identified CA-SDI-20,816 site are within the APE for Alternative 2A, Alternative 1B, Alternative 1A, or the No Project/No Federal Action Alternative.

The majority of the sites within the cultural study area are prehistoric (considered here to be before the Gaspar de Portolá expedition of 1769). These sites located around the margins of the lagoon provide evidence of the extensive prehistoric use of lagoon and estuarine resources. Of the 21 prehistoric sites recorded within 300 feet of the APE, four are shell scatters or shell middens, one is a temporary camp with three loci, and another 12 are sites that can be generally categorized as lithic and shell scatters although most also contain other cultural materials (e.g., hearth, ceramics, groundstone, faunal bone, and/or fire-affected rock). One site (CA-SDI-18,009) contains a range of cultural materials, which is suggestive of stable occupation rather than short-term use. The cultural materials recovered consisted of shell, flaked and groundstone artifacts, ceramics, bone tools, ornaments, hearths, and a dog burial. Among the prehistoric sites are two that appear to lack shell, including a groundstone and lithic scatter and a midden with groundstone and a hearth.

One additional prehistoric site with a shell midden, mortars, and a pestle (CA-SDI-13,754) has been recorded along the open coast and extends into the ocean. The submerged portions of this resource may represent a secondary deposit from cliff erosion, rather than an inundated site. Numerous submerged prehistoric sites have been recorded off the coast of southern California, identified mainly by the presence of stone grinding implements (Masters 1983).

**Table 3.7-1**  
**Archaeological Sites within 300 Feet of the Lagoon Study Area**

Resource Number	Component	Description
CA-SDI-CA-SDI-214	U (most likely P)	No descriptive information was provided on the site record regarding what type of site.
CA-SDI-215	M	Shell midden, lithic scatter, historic trash scatter dating to the 1940s, and a flexed human burial was discovered in 1935 during road grading. The site was partially destroyed by railroad construction in 1998.
CA-SDI-216	P	Large shell and lithic scatter.
CA-SDI-4546	P	Groundstone and lithic scatter.
CA-SDI-4574	P	Shell midden, groundstone and lithic scatter, 2 pieces of ceramic, hearth feature.
CA-SDI-4575	P	Shell, groundstone and lithic scatter, fire-affected rock.
CA-SDI-4576	P	Shell and lithic scatter.
CA-SDI-6848	P	Shell midden, groundstone and lithic scatter, fire-affected rock
CA-SDI-6850	P	Large shell midden, lithic scatter, hearth feature. The site has been partially destroyed by road construction.
CA-SDI-6852	P	Lithic and shell scatter.
CA-SDI-6853	P	Shell midden, flaked lithic scatter, 2 manos, fire-affected rock.
CA-SDI-6854	H	Four concrete foundations associated with a circa 1915 kelp processing factory.
CA-SDI-6856	H	Two cement foundations, fish pond.
CA-SDI-6857	H	Two historic house foundations and a well site.
CA-SDI-6858	H	Historic water line and pilings circa 1928.
CA-SDI-10,220	P	Temporary camp with three loci.
CA-SDI-10,645	P	Shell, ceramic, and lithic scatter; 1 mano fragment.
CA-SDI-13,754	P	Shell midden, sandstone mortars, pestles.
CA-SDI-13,903	P	Shell and lithic scatter, mammal and fish bone, charcoal.
CA-SDI-14,148	M	Shell scatter, cement stem-wall foundation and well or cistern, historic artifacts found during testing.
CA-SDI-14,149	H	Historic foundation and cistern.
CA-SDI-14,150	P	Shell scatter.
CA-SDI-14,796	H	Half-basement, cement foundation, privy, cistern, and trash scatter.
CA-SDI-17,376	P	Shell and lithic scatter, fire-affected rock.
CA-SDI-17,397	P	Shell scatter, hearth features.
CA-SDI-17,398	P	Shell midden, lithic scatter, charcoal, groundstone artifacts.
CA-SDI-17,400	P	Midden, hearth, groundstone artifacts.
CA-SDI-18,009	P	Shell midden, mammal bones, lithic and ceramic scatter, groundstone artifacts, shell beads, bone tools and beads, 5 hearths, fire-affected rock, 1 dog burial, glass fragments, slate pendant.
CA-SDI-20,816	P	Shell scatter.
SDM-W-80	P	Shell midden.
P-37-029481	H	Railroad alignment, wood pilings; abandoned.

H = Historic M = Multi-component P = Prehistoric U = Undefined

No descriptive information is available for site CA-SDI-214. Based on the site number (numbers are assigned sequentially), it is one of the earliest sites recorded in San Diego County. The mapped location of the site is entirely developed and it has likely been destroyed.

Two sites have prehistoric and historic components. These are a shell midden, lithic scatter with a human burial, and a 1940s trash scatter; and a site with a shell scatter, cement foundation, well or cistern, and historic artifacts. The prehistoric and historic components are unrelated to one another.

Seven of the archaeological sites within the cultural study area are historic in nature. These include remnants of an early 20th century kelp processing factory; building foundations and a well representing former residences; cement foundations and a fish pond; a half-basement, cement foundation, privy, cistern, and trash scatter; historic foundations with an associated cistern; a historic waterline; and an approximately 1,000-foot-long section of an abandoned alignment of the Santa Fe Railroad. The segment is adjacent to the existing NCTD railroad. As discussed in Section 2.3, planned improvements to the NCTD railroad by SANDAG in partnership with NCTD include replacement of the bridge over San Elijo Lagoon. The segment of the Santa Fe Railroad would be addressed as part of that study.

#### ***Native American Consultation***

The NAHC was contacted by AECOM in July 2012 for a search of their Sacred Lands files. The search identified no Native American traditional cultural properties, or resources of religious or cultural significance to Native Americans within the APE. The NAHC provided a list of interested tribes and persons. An information letter, map, and response form were sent to each of the tribes and persons on the contact list. A Native American monitor was not present during the surveys. Responses to the contact program consisted of requests for a Native American cultural monitor to be present during activities associated with the project, a copy of the cultural technical report, and additional information regarding activities proposed for the project. Contacts and responses are provided in Appendix I. The Corps will also be conducting tribal consultation in accordance with Section 106 requirements and Corps implementing regulations (33 CFR Part 325, Appendix C), as described at the start of this section.

#### ***Historic Structures***

Four historic resources have been identified within the cultural study area area, including a segment of a historic road and three bridges. The first resource, a segment of Coast Highway 101 (P-37-033047), is well over 50 years old, but has been widened and improved many times over the years and its setting has been altered with the introduction of modern-era developments.



Local modifications to Coast Highway 101 occurred as recently as 2013 as part of the Coast Highway 101 Westside Improvements just south of the lagoon in Solana Beach. Although the alignment of the highway segment (P-37-0033047) has not been altered, the roadway itself does not appear eligible for listing in the NRHP or CRHR due to loss of integrity. The three bridges, Bridge Nos. 57C0210, 570458L, and 570458R, have been previously evaluated in the Caltrans Historic Highway Bridge Inventory and listed as Category 5, not eligible for the NRHP (Caltrans 2013). The bridges are also considered not eligible for the CRHR. The records and literature search indicates that no historic buildings are within 300 feet of the cultural study area. No potentially eligible historic properties or historical resources for the purposes of CEQA have been identified within the APE. Thus, no impacts to historic resources are anticipated.

### **3.7.2 CEQA THRESHOLDS OF SIGNIFICANCE**

The federal criteria used to evaluate resources that may be affected by this project are those provided in the NHPA. The NRHP criteria are presented in 36 CFR 60.4 as follows:

The quality of significance in American history, architecture, archeology, and culture is present in districts, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association, and:

- A. That are associated with events that have made a significant contribution to the broad patterns of our history; or
- B. That are associated with the lives of persons significant in our past; or
- C. That embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or
- D. That have yielded, or may be likely to yield, information important in prehistory or history.

A cultural resource is considered “historically significant” under CEQA if the resource meets the criteria for listing in the CRHR. These criteria define an “important” archaeological resource as one which:

- 1. Is associated with events that have made a significant contribution to the broad patterns of California’s history and cultural heritage; or
- 2. Is associated with the lives of persons important in our past; or

3. Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possess high artistic values; or
4. Has yielded, or may be likely to yield, information important in prehistory or history.

As discussed in Section 3.7.1, unevaluated resources are considered potentially eligible for listing in the NRHP and the CRHR and are treated as eligible for the purposes of impact/effect analysis.

A significant impact related to cultural resources would occur if implementation of the proposed project would:

- A. Directly, indirectly, or cumulatively damage or destroy a significant historic or archaeological resource as defined above by NHPA and CRHR; or
- B. Cause a direct or cumulatively substantial change in the significance of a historical resource. Substantial adverse change in the significance of a historical resource includes demolition, destruction, relocation, or alteration of the resource (archaeological, historical, or human remains) or its immediate surroundings to the extent that the significance of the resource is materially impaired.

The CEQA thresholds of significance for cultural resources are derived from legal definitions set forth in the NHPA and CRHR, as well as Section 15064.5(b) of the State CEQA Guidelines.

### **3.7.3 ENVIRONMENTAL CONSEQUENCES**

Impacts to historic properties, cultural resources, or CRHR-eligible resources may be either direct or indirect. Direct impacts are caused by and are immediately related to a project such as ground-disturbing activities. Indirect impacts are not immediately related to the project, but they are caused indirectly by a project. An indirect impact is to be considered only if it is a reasonably foreseeable impact that may be caused by the project. An example of an indirect impact would be the placement of a pedestrian bridge next to a cultural resource, which could impact cultural resources indirectly through the surface collection of artifacts by bridge users. Indirect impacts can also occur as a result of changes to the setting or feeling of an NRHP- or CRHR-eligible cultural resource. The resources most often affected include historic buildings, structures, objects, or districts, as well as areas used by Native Americans for ceremonial or traditional activities. Direct impacts to historic properties, cultural resources, or CRHR-eligible resources occur as a result of ground-disturbing activities.

Activities common to Alternative 2A, Alternative 1B, and Alternative 1A would include dredging, grading, removal of material from the lagoon, flooding, use of staging areas, access road improvements, and construction of new access roads. Alternative 2A ground disturbance would also include demolition of a portion of the existing Coast Highway 101 roadway and construction of a new Coast Highway 101 bridge at the location of the proposed new inlet to the lagoon. Seismic retrofits to the existing Coast Highway 101 bridge would occur under Alternative 1B and Alternative 1A.

Both the temporary and permanent activities involving ground disturbance would have the same effect (either direct or indirect) on historic properties, cultural resources, or CRHR-eligible resources; therefore, they are addressed together in this impact analysis.

Special conditions are included in all Corp permits in accordance with 33 CFR 325.5(a)(2), Part 325 (Appendix A), Part 325 (Appendix C, Paragraph 11), and 36 CFR 800.13 that mandate cultural resources monitoring and require work to stop and notification of the Corps if cultural artifacts are discovered during project activities.

## **Lagoon Restoration**

### ***Alternative 2A–Proposed Project***

While there is archaeological evidence of extensive prehistoric use and occupation within the cultural study area, no known cultural or eligible historic resources are located within the APE for Alternative 2A. Because the proposed project is dredging to restore wetland habitat and function within San Elijo Lagoon, there would be no increase in non-project-related pedestrian traffic in the vicinity of cultural resources nor would the project result in alteration of setting in the vicinity of the cultural resources. **Therefore, no indirect impacts to cultural resources would occur under Alternative 2A (Criterion A) and no substantially adverse effects would result.**

As discussed in Section 3.7.1, dense fluvial and colluvial sediments accumulating in the lagoon could potentially have buried intact cultural deposits that remain at former terraces and lagoon margins that are now underwater. Numerous geotechnical exploratory sampling programs (URS 2012; Corps 2002; Laton 2002; SELC 2000) and a recent summary of prior sampling results (M&N 2010) have identified lagoon deposits and sand throughout proposed dredging locations, including channels, basins, and the sediment trap, which would be overdredged to minus 40 feet below sea level. Dredging activities would therefore have little potential to encounter intact cultural resources in these areas.



Within the APE, existing access roads are in proximity to eligible or unevaluated cultural resources CA-SDI-13903 and CA-SDI-20,816. Minor road improvements, such as shallow surface grading along the road alignment, may be necessary to safely accommodate construction traffic, but staging and access roads would be sited at existing access points and previously disturbed areas, where feasible, minimizing these disturbances (PDF-19). Construction equipment and vehicles would be restricted to the staked limits of disturbance (PDF-4). However, **it is possible that accidental disturbance to nearby cultural resources could occur during improvements or use of the access roads and result in a potentially significant impact under CEQA (Criteria A and B). Because no known cultural resources are located within the APE, project design features are included to minimize potential for accidental disturbance, and cultural resource monitoring would be required as a condition of the Section 404 permit issued by the Corps, this potential impact is not considered substantially adverse under NEPA.**

Some areas beyond the APE may be subject to temporary controlled flooding to provide necessary water depth for dredging operations. The temporary flooding necessary for appropriate water depth for dredging operations is not considered a potential source of adverse impact to nearby cultural resources as the floodwaters would be still with no high velocity or continuous wave action that could result in erosion or scouring. The areas of flooding would be within current and historic levels of lagoon inundation.

Under Alternative 2A, a section of the Coast Highway 101 roadway would be demolished for the proposed new inlet to the lagoon, and a new bridge constructed. It is possible that undiscovered buried cultural deposits, including human remains, may exist on stable sediments in the proposed inlet/bridge vicinity that would be exposed during demolition of the roadway, or buried under lagoon sediments. **Because bridge/inlet areas of excavation would be in locations with the possibility for cultural resources to be present, and because of the known presence of cultural resources in immediate proximity to the lagoon, the project could result in a significant impact to undiscovered buried cultural resources under CEQA (Criteria A and B). Because no known cultural resources are located within the APE and cultural resource monitoring would be required as a condition of the Section 404 permit issued by the Corps, this potential impact is not considered substantially adverse under NEPA.**

#### ***Alternative 1B***

No previously recorded cultural resources or eligible historic properties are located within the proposed APE for Alternative 1B. There are known cultural resources in immediate proximity to the lagoon, but because dredging activities would be confined to sediments above buried stable surfaces, there would be little potential to encounter such resources. This alternative would not

result in a new Coast Highway 101 bridge/inlet, thereby avoiding the potential for buried cultural deposits identified under Alternative 2A.

A connector trail would be constructed as part of Alternative 1B that would serve to connect existing trails in the central basin to the existing Nature Center trails. The new trail would be aligned over the proposed transitional area that would be constructed of fill material. Since the new trail alignment would be located over constructed fill material and outside of known cultural resource sites, there would be minimal potential for indirect impacts related to trail use near cultural sites. Because the dredging of the lagoon would not result in increased pedestrian traffic within a cultural resource site or create an alteration to the setting of cultural resources, Alternative 1B would have no indirect impacts to cultural resources. There are known cultural resources (CA-SDI-13,903 and CA-SDI-20,816) in proximity to access roads. Accidental disturbance to nearby cultural resources could occur during construction use of the existing access road near sites CA-SDI-13903 and CA-SDI-20,816 and result in a potentially significant adverse impact. **Thus, Alternative 1B would have potentially significant impacts to cultural resources under CEQA (Criteria A and B). Because no known cultural resources are located within the APE, project design features are included to minimize potential for accidental disturbance, and cultural resource monitoring would be required as a condition of the Section 404 permit issued by the Corps, this potential impact is not considered substantially adverse under NEPA.**

#### ***Alternative 1A***

Similar to the Alternative 2A and Alternative 1B, no previously recorded cultural resources or eligible historic properties are located within the proposed APE for Alternative 1A. There are known cultural resources in immediate proximity to the lagoon, but because dredging activities would be confined to sediments above buried stable surfaces, (layers of alluvial and colluvial deposits that would not contain intact cultural resources) there would be little potential to encounter such resources. This alternative would not result in a new Coast Highway 101 bridge/inlet, thereby avoiding the potential buried cultural deposits identified under Alternative 2A. The dredging of the lagoon would not result in increased pedestrian traffic or an alteration to the setting of cultural resources. Thus, Alternative 1A would have no indirect impacts to cultural resources. There are known cultural resources (CA-SDI-13,903 and CA-SDI-20,816) in proximity to access roads. Accidental disturbance to nearby cultural resources could occur during construction use of the existing access road near sites CA-SDI-13903 and CA-SDI-20,816 and result in a potentially significant adverse impact. **Thus, Alternative 1A would have potential substantial adverse effects and significant impacts to cultural resources under CEQA (Criteria A and B). Because no known cultural resources are located within the APE, project design features are included to minimize potential for accidental disturbance,**

**and cultural resource monitoring would be required as a condition of the Section 404 permit issued by the Corps, this potential impact is not considered substantially adverse under NEPA.**

*No Project/No Federal Action Alternative*

If the No Project/No Federal Action Alternative is implemented, no project-related ground-disturbing activities would occur. **As a result, there would be no significant or substantial adverse direct or indirect impact to eligible historic properties and cultural resources (Criteria A and B).**

**Materials Disposal**

Proposed offshore materials disposal/placement sites are located within former RBSP receiver and borrow sites. The locations were addressed under those programs and no cultural resources or eligible historic properties were identified.

*Alternative 2A–Proposed Project*

Offshore

While the possibility exists that submerged resources may be present along the continental shelf of southern California, as discussed in Section 3.7.1, no archaeological cultural resources have been identified within the offshore disposal locations. SO-5 and SO-6 were previously dredged and the placement of the dredged materials monitored for cultural resources as part of the 2001 and 2012 RBSPs, and they retain little or no potential for intact cultural resource deposits. Therefore, the placement of materials at offshore locations would have **no significant or substantial adverse direct or indirect impacts to cultural resources, or NRHP- or CRHR-eligible archaeological resources (Criteria A and B).**

Nearshore

No previously recorded cultural resources have been identified within the nearshore placement locations. Therefore, **the placement of materials at nearshore locations would have no significant or substantial adverse direct or indirect impacts to cultural resources, or NRHP- or CRHR-eligible archaeological resources (Criteria A and B).**



### Onshore

No previously recorded cultural resources are located within the onshore placement areas. Therefore, the **placement of materials at onshore locations as beach nourishment or project-related fill would have no significant or substantial adverse direct or indirect impacts to cultural resources or NRHP- or CRHR-eligible archaeological resources (Criteria A and B).**

#### *Alternative 1B*

This alternative would rely on the same offshore, nearshore, and onshore scenarios as Alternative 2A; there are no previously recorded cultural resources in these locations; **thus, placement of materials would have no significant or substantial adverse direct or indirect impacts to cultural resources or NRHP- or CRHR-eligible resources (Criteria A and B).**

#### *Alternative 1A*

This alternative would rely almost exclusively on the LA-5 offshore disposal site where there are no previously recorded cultural resources. Some minor onshore use of suitable material for project-related fill, similar to Alternative 2A, may occur. There are no previously recorded cultural resource sites in these onshore locations; **thus, placement of materials would have no significant or substantial adverse direct or indirect impacts to cultural resources or NRHP- or CRHR-eligible resources (Criteria A and B).**

### **3.7.4 AVOIDANCE, MINIMIZATION, AND MITIGATION MEASURES**

The following mitigation measures are required for CEQA significant impacts. Avoidance measures, including cultural monitoring, would be required components of the Corps Section 404 permit.

Project minimization and avoidance features incorporated into the project require that construction zones be staked off and that access roads be sited in previously disturbed areas to minimize the extent of ground disturbance.

Mitigation measures Cultural-1 through Cultural-3 would be required under CEQA for implementation of Alternative 2A. Mitigation measures Cultural-4 and Cultural-5 would be required under CEQA for implementation of Alternative 2A, Alternative 1B, and Alternative 1A.

Cultural-1 Implementation of Alternative 2A requires that a Monitoring and Discovery Plan shall be prepared and implemented prior to the start of ground-disturbing activities at the new Coast Highway 101 bridge and inlet to identify areas with the potential for intact cultural deposits and provide protocols in the event archaeological material is encountered during construction of the project. If previously unknown resources are identified during construction, the lines of communication and measures outlined in the Monitoring and Discovery Plan would be followed, including applicable late discovery protocols per Section 106. These measures would include:

- Ground-disturbing construction activity would be temporarily halted by the project archaeologist and/or Native American monitor at the location of the find and redirected elsewhere until the find is assessed by a qualified archaeologist for eligibility to the NRHP and CRHR.
- If the find is determined by the project archaeologist to be potentially eligible for the NRHP or CRHR:
  - on stable surfaces, an exclusionary zone would be set up around the find and marked (e.g., lath and flagging or silt fencing).
  - the cultural resources principal investigator would contact the Corps and County DPR to formulate a plan for evaluation or avoidance through redesign.
  - dredging or mechanical ground-disturbing activities would not resume in that location until the principal investigator is notified by the Corps and County DPR that activities may resume.

Evaluation procedures would include:

- subsurface excavation (in stable sediments),
- cataloging and laboratory analysis of recovered cultural materials,
- curation of the artifact collection at an approved regional facility, and
- preparation of a draft and final technical report pursuant to CEQA and NEPA documenting the discovery and addressing regional research issues, and
- consultation with local Native Americans in accordance with Section 106 regarding the significance and treatment of any cultural resources encountered.

- Cultural-2 Implementation of Alternative 2A requires that cultural resources monitoring shall be required during mechanical excavation associated with the Coast Highway 101 bridge and inlet. A qualified archaeological monitor and Native American representative shall be present during mechanical excavations in sediments with the potential for NRHP- or CRHR-eligible cultural resources.
- Cultural-3 Implementation of Alternative 2A requires that a training session for project construction personnel shall be conducted by a qualified archaeologist prior to the start of ground-disturbing activities at the Coast Highway 101 bridge/inlet. The training session shall include a review of required monitoring locations and communication protocols, types of cultural resources that might be encountered, cultural resources responsibilities, protection procedures, and avoidance measures.
- Cultural-4 If human remains are encountered during the proposed project:
- Work at that location will be suspended and redirected elsewhere.
  - Corps and County DPR will be immediately notified of the discovery.
  - Remains will be left in place and exclusionary fencing will be placed in a 50-foot radius around the discovery.
  - Under the provisions of the California PRC Section 7050.5, the County Coroner will be notified in the event of discovery of human remains.
  - If the remains are either determined to be or there is reason to believe they are Native American, the coroner will notify the NAHC within 24 hours.
  - Disposition of Native American human remains on non-federal lands is within the jurisdiction of the NAHC. The Corps and County DPR, as lead agencies for the proposed project, will initiate consultation with the NAHC. As part of the consultation process, the NAHC will notify persons most likely to be descended (MLD) from the remains. No ground-disturbing work will occur in the location of the remains until consultation between the NAHC, MLD, Corps, and County DPR has been completed, and notification by the Corps and County DPR that construction activities may resume.
  - If the remains are discovered in situ, they will be left in place and covered with weather-proof materials such as a tarp or plywood. If they are discovered in spoils, the remains will be placed in a labeled bag and, on approval by the MLD, transported to a secure locked container. An osteologist or a forensic



anthropologist will, in consultation with the MLD, inspect fragmentary bones that are suspected to be human but cannot be identified as such in the field.

Cultural-5 Exclusionary fencing shall be used to avoid inadvertent disturbance of cultural resources in proximity to the APE, staging areas, and access roads. The temporary exclusionary fencing shall be placed parallel to, but outside of the APE, staging areas, or the access road's existing limits of disturbance in locations where they are within 15 feet. Specifically, exclusionary fencing shall be placed parallel to existing access roads used for construction access near sites CA-SDI-13903 and CA-SDI-20,816.

### **3.7.5 LEVEL OF IMPACT AFTER MITIGATION**

The above CEQA mitigation measures would provide for:

- Identification and monitoring of areas with the potential to contain intact cultural resources,
- Protocol for treatment of cultural resources and human remains if encountered during construction,
- Consultation with Native Americans regarding the sacredness of archaeological sites and proper treatment of cultural resources if discovered, and, if necessary,
- Recovery and curation of any identified resources with documentation in the form of a DPR form recordation and NEPA/CEQA-compliant cultural resources technical report.

CEQA Conclusion: Impacts to cultural resources and CRHR-eligible resources would be reduced to less than significant with the implementation of the mitigation measures above.

NEPA Conclusion: With the inclusion of project avoidance and minimization measures, as well as the requirement for cultural resource monitoring as a condition of the Section 404 permit to be issued by the Corps, no substantial adverse effects to cultural resources would result.